

IN THE ABSTRACT

Applicants conducted a telephone Interview on June 11, 2010 with the Examiner and authorization was given to replace the Abstract. Applicants acknowledge that the Abstract has been deleted and replaced by:

The present invention provides a method and apparatus for detecting and decoding data. The method comprises: receiving a set of data signals from an external data source; detecting a size of said received set of data signals; decoding said received set of data signals; extracting a destination address from said set of data signals; comparing said destination address extracted from said data signals to a known data value; determining whether said received data signals should be received by a host circuitry based upon said comparison of said destination address extracted from said data signals to a known data value; generating at least one status signal alerting said host circuitry of said determination that said received data signals should be received by said host circuitry; and waking up said host circuitry upon a determination that said received set of data is addressed to said host circuitry. The apparatus comprises: a data formatter; a clock divider; a counter; a host circuitry interface capable of transmitting and receiving data from a host circuitry; a memory circuitry; a plurality of comparators; a mask circuitry; a digital logic circuitry; a plurality of status registers; and a plurality of clocked registers.